CSM Link for Philips VOI

Danmeter A/S

Part number 56 26 00 001
Version 2

The Cerebral State Monitor, CSM, monitors the level of consciousness of a patient under anaesthesia or sedation.

The CSM Link for Philips VOI provides the monitor with an

EEG wave	(default on)

and the following numerics:

CSI	(default on)
BS	(default on)
EMG	(default on)
SQI	(default off)
White sensor impedance	(default off)
Black sensor impedance	(default off)
HI-CSI alarm	(default off) *
LO-CSI alarm	(default off) *

* (only valid for CSM SW 2.x and above)

For further description of the numerics see CSM user manual.

Note: Information in Philips Monitor is delayed a few second (typically 3-5s) compared to the information in the CSM display, due to transmitting the data from CSM to the Philips Monitor.

Setup

- Install VueLink AUX Plus Type B as described in “Philips M1032A VueLink Module Handbook”.
- Set Vuelink to Open interface as described in “Philips M1032A VueLink Module Handbook”.
- Connect CSM Link for Philips VOI to VueLink module via interface cable M1032-61699.
- Connect power to CSM Link for Philips VOI. It is recommended to connect the power for CSM Link for Philips VOI to the same power as the Philips monitor,

so the CSM Link for Philips VOI is turned on at the same time as the Philips monitor.

- Turn on the CSM and connect CSM to CSM Link for Philips VOI as described in CSM user manual.
- After a few seconds the data will appear in the Philips Monitor

Switching wave and individual numerics on and off

To switch the CSI measurement on or off:

In the setup AUXPLUS menu select CSI to toggle between on and off

To switch individual numerics on or off:

In the setup AUXPLUS menu select actual numeric to toggle between on and off

EEG curve

The EEG curve shows 6s of processed EEG data.
EEG range ±180µV.
EEG frequency band 2-35Hz

Changing the scale of the EEG wave

Changing the scale only changes the visual appearance of the wave. It does not affect the signal analysed by the monitor or printed in reports or recordings.

INOPS

INOP Message, Indication	What to do
Sensor Alarm CSM Numerics shown with -?- EEG Wave will be flat line in 0	One or more sensors have no skin contact: Replace sensors, remember proper skin preparation. Patient cable might be disconnected: Reconnect patient cable.
Repl. CSM Battery Numerics shown as normal EEG wave as normal	Battery in CSM is almost empty: replace battery or connect to mains
Artifact CSM Numerics shown with -?- EEG wave as normal	The measured signal is too noisy to be included in calculations: Might be seen when diathermia is used.
Impedance too high Numerics shown with -?- EEG wave as normal	The impedance for one or more sensors is above the valid range: Replace sensor, remember proper skin preparation.
Communication CSM Numerics shown with -?- EEG Wave will be flat line in bottom of window	No communication between CSM and CSM Link for Philips VOI: Establish communication, see CSM DFU
AUXPLUS CHK Cable Numerics are removed EEG Wave is removed	Cable between VueLink and CSM Link for Philips VOI Not connected to VueLink module: Connect cable, if faulty then replace.
Vuelnk check setup Numerics are removed EEG Wave is removed	No power supply on CSM Link: Connect power to CSM Link for Philips VOI
VueLnk Check conf. Numerics are removed EEG Wave is removed	Cable between VueLink and CSM Link not connected to CSM Link: Connect cable to CSM Link for Philips VOI

Alarms

Alarm message, indication	What to do
CSI too low* CSI blinking, other numerics shown as normal EEG wave as normal	CSI lower than low limit.
CSI too high* CSI blinking, other numerics shown as normal EEG wave as normal	CSI higher than high limit.

* (only valid for CSM SW 2.x and above)

See VueLink INOP Messages in “Instructions for use” for the actual monitor.